

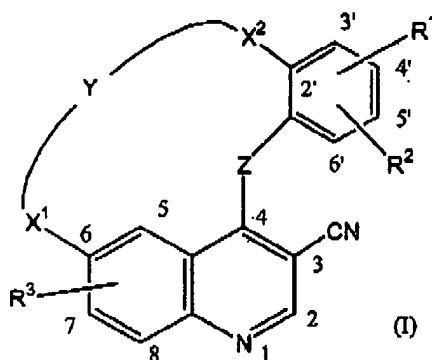
USSN 10/596,509

PRD2168USPCT

Listing of Claims:

This listing of claims replaces all prior versions, and listings, of claims in the captioned application.

1. (currently amended) A compound having the formula



the N-oxide forms, the pharmaceutically acceptable addition salts and the stereochemically isomeric forms thereof, wherein

Z represents NH;

Y represents $-C_{1-5}\text{alkylene}-NR^{12}-C_{1-5}\text{alkylene}$;

X^1 represents O;

X^2 represents a direct bond;

R^1 represents hydrogen, cyano, halo, hydroxy, formyl, $C_{1-6}\text{alkoxy}$ -, $C_{1-6}\text{alkyl}$ -,

$C_{1-6}\text{alkoxy}$ - substituted with halo,

$C_{1-6}\text{alkyl}$ substituted with one or where possible two or more substituents selected from hydroxy or halo;

R^2 represents hydrogen, cyano, halo, hydroxy, hydroxycarbonyl-, Het¹⁶-carbonyl-,

$C_{1-6}\text{alkyloxycarbonyl}$ -, $C_{1-6}\text{alkylcarbonyl}$ -, aminocarbonyl-,

mono- or di($C_{1-6}\text{alkyl}$)aminocarbonyl-, Het¹, formyl, $C_{1-6}\text{alkyl}$ -, $C_{2-6}\text{alkynyl}$ -,

$C_{3-6}\text{cycloalkyl}$ -, $C_{3-6}\text{cycloalkyloxy}$ -, $C_{1-6}\text{alkoxy}$ -, Ar⁵, Ar¹-oxy-, dihydroxyborane,

$C_{1-6}\text{alkoxy}$ - substituted with halo,

$C_{1-6}\text{alkyl}$ substituted with one or where possible two or more substituents selected from halo,

hydroxy or NR^4R^5 ,

USSN 10/596,509

PRD2168USPCT

C₁₋₄alkylcarbonyl- wherein said C₁₋₄alkyl is optionally substituted with one or where possible two or more substituents selected from hydroxy or

C₁₋₄alkyl-oxy-;

R³ represents hydrogen, hydroxy, Ar³-oxy, Ar⁴-C₁₋₄alkyloxy-, C₁₋₄alkyloxy-,

C₂₋₄alkenyloxy- optionally substituted with Het¹² or R³ represents C₁₋₄alkyloxy substituted with one or where possible two or more substituents selected from

C₁₋₄alkyloxy-, hydroxy, halo, Het²-, -NR⁶R⁷-, -carbonyl- NR⁸R⁹ or Het³-carbonyl-;

R⁴ and R⁵ are each independently selected from hydrogen or C₁₋₄alkyl;

R⁶ and R⁷ are each independently selected from hydrogen, C₁₋₄alkyl, Het⁸-, aminosulfonyl-, mono- or di(C₁₋₄alkyl)-aminosulfonyl, hydroxy-C₁₋₄alkyl-,

C₁₋₄alkyl-oxy-C₁₋₄alkyl-, hydroxycarbonyl-C₁₋₄alkyl-, C₃₋₆cycloalkyl, Het⁹-carbonyl-C₁₋₄alkyl-, Het¹⁰-carbonyl-, polyhydroxy-C₁₋₄alkyl-, Het¹¹-C₁₋₄alkyl- or Ar²-C₁₋₄alkyl-;

R⁸ and R⁹ are each independently selected from hydrogen, C₁₋₄alkyl, C₃₋₆cycloalkyl, Het⁴-, hydroxy-C₁₋₄alkyl-, C₁₋₄alkyloxy-C₁₋₄alkyl- or polyhydroxy-C₁₋₄alkyl-;

R¹² represents hydrogen, C₁₋₄alkyl, Het¹³-, Het¹⁴-C₁₋₄alkyl- or phenyl optionally substituted with one or where possible two or more substituents selected from hydrogen, hydroxy, amino or C₁₋₄alkyloxy-;

Het¹ represents a heterocycle selected from piperidinyl, morpholinyl, piperazinyl, furanyl, pyrazolyl, dioxolanyl, thiazolyl, oxazolyl, imidazolyl, isoxazolyl, oxadiazolyl, pyridinyl or pyrrolidinyl wherein said Het¹ is optionally substituted amino, C₁₋₄alkyl, hydroxy-C₁₋₄alkyl-, phenyl, phenyl-C₁₋₄alkyl-,

C₁₋₄alkyl-oxy-C₁₋₄alkyl- mono- or di(C₁₋₄alkyl)amino- or amino-carbonyl-;

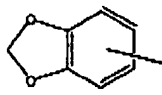
Het² represents a heterocycle selected from morpholinyl, piperazinyl, piperidinyl, pyrrolidinyl, thiomorpholinyl or dithianyl wherein said Het² is optionally substituted with one or where possible two or more substituents selected from hydroxy, halo, amino, C₁₋₄alkyl-, hydroxy-C₁₋₄alkyl-, C₁₋₄alkyl-oxy-C₁₋₄alkyl-, hydroxy-C₁₋₄alkyl-oxy-C₁₋₄alkyl-, mono- or di(C₁₋₄alkyl)amino-, mono- or di(C₁₋₄alkyl)amino-C₁₋₄alkyl-, amino-C₁₋₄alkyl-, mono- or di(C₁₋₄alkyl)amino-sulfonyl-, aminosulfonyl-;

Het³, Het⁴ and Het⁸ each independently represent a heterocycle selected from morpholinyl, piperazinyl, piperidinyl, furanyl, pyrazolyl, dioxolanyl, thiazolyl, oxazolyl, imidazolyl, isoxazolyl, oxadiazolyl, pyridinyl or pyrrolidinyl wherein said Het³, Het⁴ or Het⁸ is optionally substituted with one or where possible two or more substituents selected from hydroxy-, amino-, C₁₋₄alkyl-, C₃₋₆cycloalkyl-C₁₋₄alkyl-, aminosulfonyl-, mono- or di(C₁₋₄alkyl)aminosulfonyl or amino-C₁₋₄alkyl-;

USSN 10/596,509

PRD2168USPCT

Het⁹ and Het¹⁰ each independently represent a heterocycle selected from furanyl, piperidinyl, morpholinyl, piperazinyl, pyrazolyl, dioxolanyl, thiazolyl, oxazolyl, imidazolyl, isoxazolyl, oxadiazolyl, pyridinyl or pyrrolidinyl wherein said Het⁹ or Het¹⁰ is optionally substituted C₁₋₄alkyl, C₃₋₆cycloalkyl-C₁₋₄alkyl- or amino-C₁₋₄alkyl-;



Het¹¹ represents a heterocycle selected from indolyl or

Het¹² represents a heterocycle selected from morpholinyl, piperazinyl, piperidinyl, pyrrolidinyl, thiomorpholinyl or dithianyl wherein said Het¹² is optionally substituted with one or where possible two or more substituents selected from hydroxy, halo, amino, C₁₋₄alkyl-, hydroxy-C₁₋₄alkyl-, C₁₋₄alkyl-oxy-C₁₋₄alkyl-, hydroxy-C₁₋₄alkyl-oxy-C₁₋₄alkyl-, mono- or di(C₁₋₄alkyl)amino- or mono- or di(C₁₋₄alkyl)amino-C₁₋₄alkyl-;

Het¹³ represent a heterocycle selected from pyrrolidinyl or piperidinyl wherein said Het¹³ is optionally substituted with one or where possible two or more substituents selected from C₁₋₄alkyl, C₃₋₆cycloalkyl, hydroxy-C₁₋₄alkyl-, C₁₋₄alkyloxyC₁₋₄alkyl or polyhydroxy-C₁₋₄alkyl-;

Het¹⁴ represent a heterocycle selected from morpholinyl, pyrrolidinyl, piperazinyl or piperidinyl wherein said Het¹⁴ is optionally substituted with one or where possible two or more substituents selected from C₁₋₄alkyl, C₃₋₆cycloalkyl, hydroxy-C₁₋₄alkyl-, C₁₋₄alkyloxyC₁₋₄alkyl or polyhydroxy-C₁₋₄alkyl-;

Het¹⁶ represent a heterocycle selected from morpholinyl, pyrrolidinyl, piperazinyl, 1,3,2-dioxaborolane or piperidinyl wherein said heterocycle is optionally substituted with one or more substituents selected from C₁₋₄alkyl; and

Ar¹, Ar², Ar³, Ar⁴ and Ar⁵ each independently represent phenyl optionally substituted with cyano, C₁₋₄alkylsulfonyl-, C₁₋₄alkylsulfonylamino-, aminosulfonylamino-, hydroxy-C₁₋₄alkyl, aminosulfonyl-, hydroxy-, C₁₋₄alkyloxy- or C₁₋₄alkyl.

USSN 10/596,509

PRD2168USPCT

2. (currently amended) A compound according to claim 1 wherein;

R^1 represents halo;

R^2 represents hydrogen, cyano, halo, hydroxy, hydroxycarbonyl-, C_{1-4} alkyloxycarbonyl-, Het^{16} -carbonyl-, C_{2-6} alkynyl-, Ar^5 or Het^1 ;

In a further embodiment R^3 represents hydrogen, cyano, halo, hydroxy, C_{2-6} alkynyl or Het^4 ;

R^3 represents hydrogen, hydroxy, C_{1-4} alkyloxy-, Ar^4 - C_{1-4} alkyloxy or R^3 represents

C_{1-4} alkyloxy substituted with one or where possible two or more substituents selected from C_{1-4} alkyloxy- or Het^2 -;

R^{12} represents Het^{14} - C_{1-4} alkyl, in particular morpholinyl- C_{1-4} alkyl;

Het^1 represents thiazolyl optionally substituted amino, C_{1-4} alkyl, hydroxy- C_{1-4} alkyl-, phenyl, phenyl- C_{1-4} alkyl-, C_{1-4} alkyl-oxy- C_{1-4} alkyl- mono- or di(C_{1-4} alkyl)amino- or amino-carbonyl;

Het^2 represents a heterocycle selected from morpholinyl, piperazinyl, piperidinyl or pyrrolidinyl wherein said Het^2 is optionally substituted with one or where possible two or more substituents selected from hydroxy, amino or C_{1-4} alkyl-;

Het^{14} represents a heterocycle selected from morpholinyl, piperazinyl, piperidinyl or pyrrolidinyl wherein said Het^{14} is optionally substituted with one or where possible two or more substituents selected from hydroxy, amino or C_{1-4} alkyl-;

Het^{16} represents a heterocycle selected from piperidinyl, morpholinyl or pyrrolidinyl;

Ar^4 represents phenyl optionally substituted with cyano, hydroxy-, C_{1-4} alkyloxy or C_{1-4} alkyl; and

Ar^5 represents phenyl optionally substituted with cyano, hydroxy, C_{1-4} alkyloxy or C_{1-4} alkyl.

USSN 10/596,509

PRD2168USPCT

3. (previously presented) A compound according to claim 1 wherein;
R¹ represents hydrogen or halo;
R² represents hydrogen, cyano, halo, hydroxycarbonyl-, C₁₋₄alkyloxycarbonyl-,
Het¹⁶-carbonyl- or Ar⁵;
R³ represents hydrogen, hydroxy, C₁₋₄alkyloxy-, Ar⁴-C₁₋₄alkyloxy or R³ represents
C₁₋₄alkyloxy substituted with one or where possible two or more substituents selected from C₁₋₄
alkyloxy- or Het²;
Het² represents a heterocycle selected from morpholinyl, piperazinyl, piperidinyl or pyrrolidinyl wherein
said Het² is optionally substituted with one or where possible two or more substituents selected from
hydroxy, amino or C₁₋₄alkyl-;
Het¹⁴ represents morpholinyl;
Het¹⁶ represents a heterocycle selected from morpholinyl or pyrrolidinyl;
Ar⁴ represents phenyl; and
Ar⁵ represents phenyl optionally substituted with cyano.
4. (currently amended) A compound according to claim 1, wherein the R¹ substituent is at
position 4', the R² substituent is at position 5' and the R³ substituent is at position 7 of the structure
of formula (I).
- 5.-7. (Cancelled)
8. (previously presented) A pharmaceutical composition comprising a compound as described in
Claim 1 and a pharmaceutically acceptable carrier.
- 9.-12 (cancelled)